State of California AIR RESOURCES BOARD

EXECUTIVE ORDER D-193-27 Relating to Exemptions under Section 27156 of the Vehicle Code

Car Sound Exhaust System, Inc. "Series 46000 OBD II Compliant Three-way Catalytic Converter"

WHEREAS, Vehicle Code Sections 27156 and Section 2222(h), Title 13, California Code of Regulations (hereafter "CCR"), authorize the California Air Resources Board and its Executive Officer to exempt new aftermarket catalytic converters from the prohibitions of Vehicle Code Section 27156.

WHEREAS, Car Sound Exhaust System, Inc. (Car Sound) of 22961 Arroyo Vista, Rancho Santa Margarita, California 92688, has applied to the Air Resources Board for exemption from the prohibitions in Vehicle Code Section 27156 to market its new aftermarket Series 46000 three-way catalytic converter (TWC) for installation on selected 1996 through 2000 model year GM passenger cars equipped with on-board diagnostic II (OBD-II) systems as specified in Appendix D-193-27 and incorporated herein. The Series 46000 TWC will be used for single (1 unit) exhaust system applications for selected GM passenger cars.

The TWC may also be installed on non-OBD II vehicles (1995 and older) similar in engine and exhaust configuration to those listed in Appendix D-193-27.

WHEREAS, pursuant to the authority vested in the Executive Officer by Health and Safety Code Section 39515 and in the Chief, Mobile Source Operations Division by Health and Safety Code Section 39516 and Executive Order G-02-003, Air Resources Board finds that the above aftermarket catalytic converter complies with the California Vehicle Code Section 27156 and Title 13, California Code of Regulations, Section 2222(h). The emissions performance of the catalytic converter was based on durability bench-aging by Delphi Energy and Chassis Systems using Air Resources Board-modified RAT-A bench-aging cycle for 75 hours, as specified in the "Optional Evaluation Procedures for New Aftermarket Non-original Equipment Catalytic Converters Equipped with On-Board Diagnostic II (OBD II) Systems."

WHEREAS, emissions tests conducted at the Automotive Testing Development Services, Inc. (ATDS), Ontario, California, using a 1999 3.8L Pontiac Grand Prix equipped with a single (1 unit) exhaust system, and certified to the Low Emission Vehicle (LEV, PC) emission standards showed that the vehicle met the applicable emission standards with Series 46000 TWC (1 unit) installed.

OBD II compatibility tests performed on the same test vehicle showed that Series 46000 TWC did not affect the vehicle's ability to perform OBD II system monitoring. Emission test results in grams per mile are shown below.

	ATDS,	Ontario, Califor	nia	
	3.8L (Grand Prix Tes	it .	<u>.</u>
	NMOG	CO	NOx	Remarks
100K Standard	0.090	4.2	0.3	
Test 1	0.085	1.3	0.2	Pass
Test 2 .	0.084	1.4	0.2	Pass
Average of Tests1 & 2	0.085	1.4	0.2	Pass

IT IS HEREBY RESOLVED that the above catalytic converter is exempt from the prohibitions in Vehicle Code Section 27156 for installation on the approved vehicle applications specified in Appendix D-193-27 subject to the following conditions:

- 1. No changes are permitted to the catalytic converter as described in the application for exemption. Any changes to the catalytic converter or any of its components, and other factors addressed in this order must be evaluated and approved by the Air Resources Board prior to marketing in California.
- 2. Marketing of the catalytic converter using identifications other than those shown in the exemption application, and in this Executive Order, or marketing of the catalytic converter for application other than the ones shown in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of these products shall not be construed as an exemption to sell, offer for sale, or advertise any components of the catalytic converter as individual devices.
- 3. Any oral or written references to this Executive Order or its content by Car Sound Exhaust System, Inc., its principals, agents, employees, distributors, dealers, or other representatives must include the disclaimer that the Executive Order or the exemption it provides is not an endorsement or approval of any emission reduction claims for the catalytic converter and is only a finding that the catalytic converter is exempt from the prohibitions of Vehicle Code Section 27156.
- 4. Car Sound Exhaust System, Inc.'s installation instructions for the new catalytic converter must conform to requirements in Paragraphs I and X of the "Optional Evaluation Procedures for New Aftermarket Non-original Equipment Catalytic Converters Equipped with On-Board Diagnostic II (OBD II) Systems."
- 5. Upon installation, the catalytic converter must carry a manufacturer's warranty for 50,000 miles on the substrates and 50,000 miles or five years on the shell and end pipes.

6. Car Sound Exhaust System, Inc. and its vendors may not advertise the new aftermarket catalytic converter as a "high or easy flow" catalytic converter or use any phrase that could make it appear to perform better than an OEM catalytic converter.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after a ten day written notice of intention to revoke it, during which period the holder of the order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request, and the order may not be revoked until a determination is made, after the hearing, that grounds for revocation exist.

J. Fourenco
In Allen Lyons, Chief
Mobile Source Operations Division

APPENDIX)193-27 Car Sound Series 46000 for GM passenger Cars

Model Year	Make	Vehicle Model	Engine Size	No of Cylinders	Engine Family	Certification Level		Monitored Converter	Universal	Direct Fit
	Buick Buick	LeSabre, Park Avenue Regal		6		Tier 1	1		46006	46464 46531
	Buick	Riviera			TO 100 01 100 1/51/			, !		TBD
		Camaro	3.8L		TGM3.8V8GKEK			1		46466
	Oldsmobile	98,Delta 88, LSS]					!		46464
		Bonneville SE								46464
		Firebird				<u> </u>				46466
		Park Avenue Ultra		6		1		1		TBD
		Riviera	3.8L		TGM3.8V8GFFK	Tier 1	1		46006	46404
		Bonneville SSE							L	TBD
1996		Lumina,Monte Carlo		6	TGM3.4VJGFEK	Tier 1	1	1	46004	ļ —
		Cutlass Supreme	3.4L							46522
		Grand Prix								<u> </u>
		Century		6	TGM3.1V8GFEK	Tier 1	1	1	46004	46487
		Regal							46005	46498
	Buick	Skylark							46004	46406
	Chevrolet	Beretta,Corsica							46004	46406
	Chevrolet	Lumina,Monte Carlo	3.1L						46005	46498
	Oldsmobile		3.12						46004	46406
	Oldsmobile								46004	46487
	Oldsmobile	Cutlass Supreme	_7						46005	46498
		Grand Am							46004	46406
	Pontiac	Grand Prix							46005	46498
	Chevrolet	Camaro		6	VGM3.8V8GKEK	Tier 1	1	1	46006	46466
	Oldsmobile	Regency, Delta 88	3.8L						46009	46437
	Pontiac	Firebird							46006	46466
	Buick	Park Ave. Ultra ,Riviera		6	VGM3.8V8G1FK	Tier 1	1	- Line	46009	TBD
	Buick	Regal GS, Century	7						46006	46405
1997		Delta 88, Regency	3.8L						46009	TBD
		Bonneville SSE							46009	TBD
	Pontiac	Grand Prix							46006	46405
	Buick	LeSabre		6	VGM3.8V8G2EK	TLEV	1	1	46009	46437
	Buick	Park Ave, Riviera							46006	46515
		Regal LS, Century	2 01						46006	46405
		Delta 88 Royale	3.8L						46009	46437
		Bonneville SE							46009	46437
		Grand Prix							46006	46405

Car Sound Series 46000 for GM passenger Cars

Model Year	Make	Vehicle Model	Engine Size	No of Cylinders	Engine Family	Certification Level	Total Converter	Monitored Converter	Universal	
1997	Chevrolet	Lumina,Monte Carlo	3.4L	6	VGM3.4VJG1EK	Tier 1	1	1	46004	46522
	Oldsmobile	Cutlass Supreme		_ `]	VGINIO.4V0O1EIC	1101 1	<u>'</u>		46005	TBD
	Buick	Century							46005	46469
	Buick	Skylark		6	VGM3.1V8G1EK	Tier 1		1	46004	46460
	Chevrolet	Lumina	_]						46005	46519
	Chevrolet	Malibu	3.1L						46005	46539
		Monte Carlo					1		46005	46519
	Oldsmobile	Achieva							46004	46460
	Oldsmobile	Cutlass							46005	46539
	Oldsmobile	Cutlass Supreme							46005	46519
		Grand Am							46004	46460
	Pontiac	Grand Prix		L					46005	46469
_	Buick	LeSabre		6	WGMXV03.8048	TLEV	1	1	46009	46437
	Buick	Park Ave. Ultra	3.8L						46009	TBD
	Buick	Park Ave.							46006	46515
	Buick	Regal GS							46006	46405
	Buick	Regal LS							46006	46405
	Chevrolet	Lumina							46004	46521
		Monte Carlo							46004	46521
	Oldsmobile	Delta 88 Royale							46009	46437
1998	Oldsmobile	Intrigue							46006	46405
	Oldsmobile	Regency							46009	46437
	Pontiac	Bonneville SE							46009	46437
		Bonneville SSE							46009	TBD
	Pontiac	Grand Prix							46006	46405
		Century		6	WGMXV03.1044	TLEV	1	1		46469
	Chevrolet	Lumina, Monte Carlo, Malibu	3.1L						46005	46519
		Grand Prix	3.12						40003	46469
	Oldsmobile	Cuttass	7							46520

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Car Sound Series 46000 for GM passenger Cars

Model Year	Make	Vehicle Model	Engine Size	No of Cylinders	Engine Family	Certification Level		Monitored Converter	Universal	Direct Fit
1999	Buick	Regal	3.8L	6	XGMXV03.8051	TLEV	1	1	46006	46405
	Buick	Park Ave,Riveria,Regal							46009	TBD
	Pontiac	Grand Prix								
	Buick	LeSabre	3.8L	6	XGMXV03.8048	TLEV		1	46009	46437
	Buick	Park Ave.							46006	46515
		Regal							46006	46405
		Lumina, Camaro					1		46004	46521
		Monte Carlo							46004	46521
		Delta 88 Royale							46009	46437
	Oldsmobile								46006	46405
	Oldsmobile								46009	46437
		Bonneville SE							46009	46437
		Grand Prix, Firebird							46006	46405
	Chevrolet		3.4L	6	XGMXV03.4042	TLEV	1	1	46005	46519
		Monte Carlo							46005	46519
	Oldsmobile	Alero							46004	46435
	Buick	Century							46005	46469
	Pontiac	Grand Am SE							46004	46435
Î		Grand Am GT							46004	TBD
	Pontiac	Grand Prix							46005	46469
	Chevrolet		3.1L	6	XGMXV03.1043	LEV	1	1	46005	46520
	Oldsmobile	Cutlass	7 3.12		AGIVIA V 03. 1043	LEV			40003	40020
	Buick	Park Ave.	3.8L	6	YGMXV03.8043	LEV	1	1	46009	TBD
	Buick	Regal							46006	46405
2000	Chevrolet								46006	46405
2000	Pontiac	Bonneville SE							46009	TBD
ł.	Pontiac	Firebird, Trans AM							46006	46466
	Pontiac	Grand Prix							46006	46405